

James F. White, Jr.
Professor, Department of Plant Biology & Plant Pathology
Rutgers University, School of Environmental & Biological Sciences (SEBS)
59 Dudley Road, New Brunswick, New Jersey
Office Tel: 848-932-6286; Fax: 732-932-9441
E-mail: Jwhite@aesop.rutgers.edu

1. Education:

1981 Auburn University, Auburn, Alabama	Botany	BS
1987 The University of Texas at Austin, Texas	Botany/Mycology	Ph.D.
1988 The Ohio State University, Ohio	Botany/Mycology	Post-Doc

2. Professional Experience/Employment History:

1995-Present Rutgers University; Dept Plant Biology & Pathology; Assistant Professor; Associate Professor, Full Professor (beginning 2002)

1988-1995 Auburn University at Montgomery; Dept. Biology; Assistant Professor, Associate Professor

3. Major Areas of Expertise:

Mycology, role of reactive oxygen in plant-microbe interactions, isolation and cultivation of fungi, fungal ecology, microbial ecology, endophytic microbes, systematics.

4. A Short BioSketch of Prof. White's Professional Activities:

Professor White studies the biology of microbes that associate with plants, primarily endophytes. His work over the past 30 years has focussed on microbes that become endophytic in plants and affect the ecology of the host plant.

5. Honors:

2005 AAAS Fellow. One of two Rutgers University Professors named as Fellow of the American Association for the Advancement of Science in 2005 for research on the biology and ecology of endophytic fungi.

1998 Research Excellence Award (Cook College, Rutgers University). For research performance.

1998 Rutgers Board of Trustees Research Fellowship. For scholarly excellence.

1996 Alexopoulos Prize (Mycological Society of America). *For innovative mycological research.*

1994 University Distinguished Researcher Award (Auburn University at Montgomery).

1993 Faculty Research Award (Auburn University at Montgomery).

6. Books (Authored and edited):

1. White, J., and M. S. Torres (editors). 2009. *Defensive Mutualism in Microbial Symbiosis*. Taylor & Francis Publishers, NY. 430 pages; ISBN: 9781420069310.
2. Dighton, J., J. F. White, Jr., and P. Oudemans (editors). 2005. *The Fungal Community: Its Organization and Role in the Ecosystem (Third edition)*. CRC Press, Boca Raton, FL. 936 pages; ISBN 0824723554.
3. White, J.F., Jr. C. W. Bacon, J. Spatofora, N. Hywel-Jones (editors). 2004. *The Clavicipitalean Fungi*. Marcel-Dekker, New York. 640 pages; ISBN-10: 0824742559; ISBN-13: 978-0824742553.
4. Bacon, C. W., and J. F. White, Jr. (editors). 2000. *Microbial Endophytes*. Marcel-Dekker, New York. 514 pages; ISBN 0824788311.
5. Bacon, C. W., and J. F. White, Jr. (editors). 1994. *Biotechnology of *Acremonium* endophytes of grasses*. CRC Press, Boca Raton, FL. 226 pages; ISBN-10: 0849362768; ISBN-13: 978-0849362767.

7. Selected Recent Research Papers and Chapters

181. Leuchtman, A., Charles Wilson Bacon, Christopher L Schardl, James F White, Mariusz Tadych. 2014. Nomenclatural realignment of *Neotyphodium* species with genus *Epichloe*. *Mycologia* 04/2014; 106(2):202-215.
180. Tadych, M., Marshall S. Bergen, James F. White. 2014. *Epichloë* spp. associated with grasses: new insights on life cycles, dissemination and evolution. *Mycologia* 04/2014; 106(2):181-201.
179. White, J.F., M.S. Torres, M. P. Somu, H. Johnson, I. Irizarry, Q. Chen, N. Zhang, E. Walsh, M. Tadych, M. Bergen. 2014. Hydrogen Peroxide Staining to Visualize Intracellular Bacterial Infections of Seedling Root Cells. *Microscopy Research and Technique* 01/2014 (In Press).
178. Beltrán-García, M.J., Fernanda M Prado, Marilene S Oliveira, David Ortiz-Mendoza, Alexandra C Scalfio, Adalberto Pessoa, Marisa H G Medeiros, James F White, Paolo Di Mascio. 2014. Singlet Molecular Oxygen Generation by Light-Activated DHN-Melanin of the Fungal Pathogen *Mycosphaerella fijiensis* in Black Sigatoka Disease of Bananas. *PLoS ONE* 01/2014; 9(3):e91616.
177. Zhang, N., Rossman, Seifert, Bennett, Cai, Hillman, Luo, Manamgoda, Meyer, Molnar, Schoch, Tadych, White. 2013. Impacts of the International Code of Nomenclature for Algae, Fungi, and Plants (Melbourne Code) on the Scientific Names of Plant Pathogenic Fungi. *APS Journal* 06/2013; APS Net Online(JuneJuly):<http://www.apsnet.org/publications/apsnetfeatures/Pages/Melbourne.aspx>.
176. Krings, M., J.F. White, Dotzler, Harper. 2013. A Putative Zygomycetous Fungus with Mantled Zygosporangia and Apposed Gametangia from the Lower Coal Measures (Carboniferous) of Great Britain. *International Journal of Plant Sciences* 03/2013; 174(3):267-277.
175. Alderman, S., R.R. Halse, J.F. White. 2013. A reevaluation of the host range and geographical distribution of *Claviceps* species in the United States. *Plant Disease* 01/2013; 88:63-81.
174. Lalancette, N., Furman, L., White, J.F. 2013. Management of peach rusty spot epidemics with biorational fungicides. *Crop Protection* 01/2013; 43:7-13.

173. White, J. F., Mónica S. Torres, Holly Johnson, Ivelisse Irizarry, Mariusz Tadych. 2013. Chapter: A Functional View of Plant Microbiomes: Endosymbiotic Systems that Enhance Plant Growth and Survival. 02/2013; , ISBN: 978-81-322-1574-5; Advances in Endophytic Research.
172. Meyer, W., Monica S. Torres, James F. White. 2013. Chapter: Biology and Applications of Fungal Endophytes in Turfgrasses. 01/2013: pages 713-731; , ISBN: 978-089118-613-7.
171. White, J.F., Jr., Crawford, H., Torres, M.S., Mattera, R., Bergen, M., Irisarry, I. 2012. A proposed mechanism for nitrogen acquisition by grass seedlings through oxidation of symbiotic bacteria. Symbiosis Volume 57, Issue 3 (2012), Page 161-171; Open Access Electronic: DOI 10.1007/s13199-012-0189-8
170. Tadych, M. Bergen, M.S., Johnson-Cicalese, J., Polashock, J.J., Vorsa, N., White, J.F., Jr. 2012. Endophytic and pathogenic fungi of developing cranberry ovaries from flower to mature fruit: diversity and succession. Fungal Diversity 1-16.
169. White, J.F., Jr., Bacon, C.W. 2012. The secret world of endophytes in perspective. Fungal Ecology 5: 287-288.
168. Walker, D.M., Castlebury, L., Rossman, A.Y., White, J.F, Jr. 2012. New molecular markers for fungal phylogenetics: Two genes for species-level systematics in the Sordariomycetes (Ascomycota). Molecular Phylogenetics and Evolution
167. Tadych, M., Ambrose, K.V., Bergen, M.S., Belanger, F.C, White, J.F., Jr. 2012. Taxonomic placement of *Epichloë poae* sp. nov. and horizontal dissemination to seedlings via conidia. Fungal Diversity 1-15
166. Torres, M.S., White, J.F., Hinton, D.M., Bacon, C.W. 2011. Endophyte-mediated adjustments in host morphology and physiology and effects on host fitness traits in grasses. Fungal Ecology. DOI:10.1016/j.funeco.2011.05.006.
165. Mejía LC, Castlebury LA, Rossman AY, White JF, 2011. New species, phylogeny, host associations, and geographic distribution of genus *Cryptosporella* (Gnomoniaceae, Diaporthales). Mycologia 103: 379-399.
164. Mejía LC, Rossman AY, Castlebury LA, Yang, ZL, White JF Jr., 2011. *Occultocarpon*, a new monotypic genus of Gnomoniaceae on *Alnus nepalensis* from China. Fungal Diversity DOI 10.1007/s13225-011-0108-y.
163. Krings, M., T. N. Taylor, J. F. White, Jr. 2011. Fungal sporocarps from the Carboniferous: An unusual specimen *Traquairia*. Rev. Palaeobotany and Palynology 168: 1-6.
162. Mejía LC, Castlebury LA, Rossman AY, White JF, 2011. Systematic review of the genus *Plagiostoma* Fuckel (Gnomoniaceae) based on morphology, host-associations, and a four-gene phylogeny. *Studies in Mycology* 63: 1-72.
161. Alvarez-Loayza, P., J. F. White Jr., M. S. Torres, N. Gil, J-C. Svenning, H. Balslev, T. Kristiansen. 2011. Light converts endosymbiotic fungus to pathogen, influencing seedling survival and recruitment of host. PLoS ONE 6(1):e16386.

160. Leopoldo J. Iannone, James F. White Jr., Liliana M. Giussani; Daniel Cabral and M. Victoria Novas. 2010. *Neotyphodium* endophytes in Argentina, host diversity and distribution. *Mycological Progress* 10: 9-19, DOI: 10.1007/s11557-010-0669.
159. Torres, M.S., and J.F. White Jr. 2010. Grass endophyte-mediated plant stress tolerance: alkaloids and their functions. Pages 479-496. In: Seckbach and M. Grube (eds.) *Symbiosis and Stress*. Springer, Dordrecht.
158. Martin Grube, James F. White, Jr. and Joseph Seckbach. 2010. *Symbiosis and stress*. Pages 21-41, In: Seckbach and M. Grube (eds.) *Symbiosis and Stress*. Springer, Dordrecht.
157. Walker, D.M., Rossman, A.Y., Castlebury, L.A., Mejia, L.C., Sogonov, M.V. and White, J.F. 2010. A systematic study of the genus *Gnomoniopsis* (Gnomoniaceae, Diaporthales) based on a three gene phylogeny, host associations, and morphology. *Mycologia* 102: 1479-1496.
156. Tadych M., Chaverri P., Bergen M., White Jr., J.F. 2009. *Moelleriella zhongdongii*: stroma development and identification of hirsutella-like and *Aschersonia* synanamorphs. *Mycological Research* 113: 611-615; DOI: 10.1016/j.mycres.2009.01.011 (online February 7, 2009).
155. Crouch J.A., B.B. Clarke, J.F. White, Jr. and B.I. Hillman. 2009. Systematic analysis of the falcate-spored graminicolous *Colletotrichum* and a description of six new species of the fungus from warm-season grasses. *Mycologia* 101: 717-732.
154. Rodroguéz, RJ; White, JF; Arnold, AE. 2009. Fungal endophytes: diversity and functional roles. *New Phytologist* 182: 314-330.
153. Torres, M.S. and J.F. White Jr. 2009. Free-living and saprotrophs to plant endophytes. Pages 422-430 in *Encyclopedia of Microbiology*, 3rd edition (Moselio Schaechter, Ed.), Elsevier.
152. White, J.F. Jr. and M.S. Torres 2009. Is plant endophyte-mediated defensive mutualism the result of oxidative stress protection? *Physiologia Plantarum* Published Online: Nov 16 2009 4:07PM_Doi: 10.1111/j.1399-3054.2009.01332.x
151. White, J. F. Jr. and M. S. Torres. 2009. Symbiosis, defensive mutualism and variation on the theme. In *Defensive Mutualism in Microbial Symbiosis*, eds. J. F. White, Jr. and M. S. Torres, CRC Press., Boca Raton, Florida, pp. 3-8.